

CLAIMS

1. A method for updating software comprising the steps of:
implementing a plurality of modes on a receiver device (50) such that at least a first mode is a normal operating mode for the set top device and a second mode (10) searches for software updates;
searching (16) for software updates with at least one of the modes;
indicating (44) to one of the modes within the receiver device on occurrences of available software updates;
transferring (28) available software updates to the receiver device; and
installing (22) transferred software updates into the programmable device.
2. The method of claim 1 wherein the step of implementing further comprises as the plurality of modes an operational mode and a standby mode.
3. The method of claim 2 wherein the steps of searching (16) and transferring (28) are done in the standby mode.
4. The method of claim 2 wherein the steps of searching (16) and transferring (28) are done in the operational mode.
5. The method of claim 3 wherein the step of searching (16) further comprise in the standby mode searching for software updates, and if software updates are found an indication that software updates are available is made.
6. A receiver system (50) with a communication interface (62), the system (50) containing software in a non-volatile memory (52) that can be upgraded via network connection comprising:
a standby mode within the receiver system (50) that works in conjunction with an operational mode to install software updates, wherein the receiver system (50) normally

functions in the operational mode, and the standby mode does not function simultaneously with the operational mode; and

a routine (10) operative in either the operational mode or the standby mode to provide an indication (16) of availability for software updates that is used by the other of either the operational mode or the standby mode to identify the indication and assist in installing software updates into the receiver.

7. The system of claim 6 wherein the standby mode identifies the existence of software updates and the operational mode installs available updaters in the receiver.

8. The system of claim 6 wherein the operational mode will identify the existence of available software updates and the stand by mode will load available software updates into the receiver.

9. The system of claim 6 wherein the routine places software updates into a volatile memory that is later placed into the non-volatile memory.

10. The system of claim 9 wherein the routine places software updates into the volatile memory in the standby mode and the receiver places software updates into the non-volatile memory after reentering the operational mode.

11. A receiver system (50) with a non-volatile memory (52) that can be altered comprising:

a communication interface (62) in the receiver system that is operatively coupled to the non-volatile memory (52) under control of processing means within the receiver system;

system software means within the receiver that performs normal operation of the receiver system; and

a loader (10) that functions independently from the system software means to search (16) for software updates and retrieve (28) updates that are found;

wherein the loader runs upon an occurrence of one of a plurality of predetermined events.

12. The receiver system of claim 11 wherein the system software means runs in an operational mode wherein the system is operative to receive broadcast signals and the loader runs in a standby mode wherein normal broadcast reception functions are disabled.

13. The receiver system of claim 12 wherein the operational mode identifies that software update are available to the loader, and the loader retrieves available software updates.

14. The receiver system of claim 12 the standby mode identifies available software updates and the operational mode installs available software updates.

15. The receiver system of claim 12 wherein the receiver can locate updates in the standby mode generate an indication for the receiver that upon entering the operational mode, the indication that a software update is available is identified and the receiver then loads the new software update.

16. The receiver system (50) of claim 11 wherein the plurality of predetermined events further comprises applying power to the receiver system (50).

17. The receiver system (50) of claim 11 wherein the plurality of predetermined events further comprises changing channels on receiver system (50).

18. The receiver system (50) of claim 11 wherein the plurality of predetermined events further comprises an input to the receiver system (50)